Paper Publication System

By

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Dissertation submitted in partial fulfilment of
the requirements for the
Bachelor of Technology (Hons)
(Business Information System)

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CERTIFICATION OF APPROVAL

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A project dissertation submitted to the
Business Information System Programme
Universiti Teknologi PETRONAS
In partial fulfilment of the requirements for the
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(BUSINESS INFORMATION SYSTEM)

Approved by,

_____
(Mr. Khairul Shafee Kalid)

UNIVERSITI TEKNOLOGI PETRONAS
TRONOH, PERAK
May 2015

CERTIFICATION OF ORIGINALITY

This is to certify that I am responsible for the work submitted in this project, that the original work is my own except as specified in the references and acknowledgements, and that the original work contained herein have not been undertaken or done by unspecified sources or persons.

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MAISARAH BINTI MOHD YUSAK

ABSTRACT

Paper Publication System is being developed to provide solutions to both of coordinator and postgraduate students of Computer Information Sciences, Universiti Teknologi PETRONAS in order to disseminate and receive information easily and immediately. The paper is written to understand the reason why the system need to be developed and the benefits to the coordinator and postgraduate students. But, of course, in order to develop a system, there is need to understand the business process and the business requirement. There is also a need to understand the challenges and advantages of writing the paper publications to align with the business process and business requirement. Otherwise, the system could be categorized as another failed project in the industry.

ACKNOWLEDGEMENT

Thanks to Allah SWT, whom with His willing giving me the opportunity to complete this Final Year Project (FYP) which was entitled Paper Publication Information System (PPIS). This FYP report was prepared to fulfil the coursework requirements of Universiti Teknologi PETRONAS (UTP).

Next, my special thanks to Dr Ahmad Sobri Hashim as FYP UTP Coordinator for great commitment and cooperation during my Final Year Project. His reminder of FYP items from time to time allowed me to complete the requirement needed to successfully completing the FYP.

Next, I would like to express my deepest thanks to Mr. Khairul Shafee Kalid, my Supervisor in charged to supervise my FYP project for our cooperation during the completion of the FYP course that had given valuable information, suggestions and guidance in the compilation and preparation this FYP report. Also thanks to internal and external examiners for the critics, comments, and guidance to improve the writings and system's development.

Last but not least, deepest thanks and appreciation to my parents, siblings, and best friends, classmates, and coursemates for their cooperation, encouragement, constructive suggestion and full of support for the report completion, from the beginning till the end of the SIIP period.

Best of Regards,
Maisarah binti Mohd Yusak,
Final Year Final Semester,
Business Information Systems,
Universiti Teknologi PETRONAS.

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CHAPTER 1

INTRODUCTION

In this chapter, the author will describe a brief overview of the project that covers the background of the project, problem statement, objectives and scope of study of the project, and the significance and feasibility of the project.

1.1 Background

There a lots of academic institutions in Malaysia. Malaysian higher education are covering 20 public universities, and 22 private universities, including seven international university campuses, 34 polytechnics, and 91 community colleges (Wikipedia.com, 2015; Moe.gov.my, 2015). There are wide ranges of field programs offered to the students from non-technical to technical programs. From the numbers of the educational institutions mentioned above, the scope of the study for this project has been narrowed down to an educational institution. The educational institution was Universiti Teknologi PETRONAS (UTP).

In UTP, there is a department named Computer Information Sciences (CIS). The CIS department of UTP offers two postgraduate level of study programmes namely Master of Science in Information Technology and Doctor of Philosophy in Information Technology. Strong stamina in research and passion in publication is a must on top of excellent academic achievement and industrial experience. Each student will be assigned to a supervisor and co-supervisor according to their area of expertise and students are expected to update the supervisors on their research progress. It is common for the postgraduate students to publish, at least two paper publications before the viva (Utp.edu.my, 2015).

These papers are required to be submitted to the coordinator before being evaluated by the reviewers. While waiting for the current status of the papers, postgraduate students do not have any platform to get the update regarding the paper either being approved or being rejected and who hold the paper. Therefore, the postgraduate students have to set up an appointment with coordinator to get update of

the current status of papers. Thus, the coordinator has to check his availability to align with students' appointment. Otherwise, the students can make a phone call or email the coordinator to get the update of the paper publications. However, these three platforms; set up an appointment, make a call or email are taking time of both postgraduate students and coordinator. The coordinator has to check the paper's status and postgraduate students have to wait for coordinator reply their answer. And it is inefficient and costly. While having a system, the coordinator has a specific platform to disseminate the information regarding the paper's status automatically to the postgraduate students.

The platform mentioned is having an information system entitled, "Paper Publication System". The system should allow the coordinator to update the paper's status and assigning reviewers for evaluation processes. The system also allows coordinator to generate a statistical report to be handed to the Head of Department (HOD) of CIS for future reference. And at the same time, the system allows the postgraduate students to keep track with their paper's status. The system will keep all the information regarding the paper submitted to the coordinator.

1.2 Problem Statement

There is a lack of platform for coordinator to disseminate any information regarding the paper's status and paper's approval and notify the postgraduate students automatically. Currently, the platforms used to update the papers' status are phone call, email, and appointment. These platforms are taking time, costly, and inefficient. Thus, there is a need to develop a system which allows the coordinator to notify postgraduate students the papers' status immediately after reviewers had being assigned to the papers.

The main reason to develop an information system for postgraduate students is to create an online platform where it is accessible for both of coordinator and postgraduate students. Currently, the coordinator used Microsoft Excel 2007 to manage the paper's information and the file can only be access by coordinator only.

Thus, the postgraduate students have to reach the coordinator by making a phone call, sending an email, and set up an appointments. These platforms are taking time, costly and inefficient. Therefore, by having a system, both of postgraduate students and coordinator can have the same access towards the paper's status.

Another problem that creates the need to develop an information system, the data model diagram of the tool's file is highly de-normalized with a single table. Even though, the selects are very fast as the data is present in the same table and there is no need for any joins, the updates and inserts would be complex and costly as the data is duplicated (ovais.tariq, 2010). Therefore, along the designing phase, a normalized data model diagram could be a great outcome to be implementing in the development phase as the updates and inserts are fast because the updates and inserts is affecting a single entity and does not have to be duplicated (ovais.tariq, 2010).

To support the argument to develop the information system, the tool's file cannot generate report automatically. The information system can generate a report automatically while requesting by the coordinator. The auto generated report will ease the coordinator while reporting to the HOD of CIS. The report can produce a statistical tabular automatically.

1.3 Objectives of the Project

The objectives of this project are as follow:

- To understand the problems arise from the current business process to assign reviewers and disseminate the paper's status.
- To gather information and analyze of what the system should do and the actors affected with the information system development.
- To design the logical database, system architecture and graphical user interfaces for the system.

- To deliver a prototype by implementing the design of logical database and graphical user interfaces based on the requirements gathered during the development phase.
- To test the prototype and to ensure the functionalities of the system is working.

1.4 The Scope of Study

In this project, the scope of study has been specified to gather requirement for developing a system that benefit to both of postgraduate students and coordinator of the Computer Information System Department in Universiti Teknologi PETRONAS. The main functionalities of the information system are allowing the postgraduate to check their paper's status, allow the coordinator update paper's status and assigning reviewers. The information system is providing a platform which can be accessible to both postgraduate students and coordinator whom has the background of Computer Information Sciences.

1.5 Significance of the Project

The significance of the project is allowing the coordinator to disseminate the information automatically to the postgraduate students, once reviewers had been assigned to the papers. At the same time, the system can generate a statistical report for the coordinator.

CHAPTER TWO

LITERATURE REVIEW

Paper publication is a requirement that need to be fulfilled by the postgraduate students. The requirement is required by the university as a part of the coursework in research field. The number of paper publications required by the university may vary. In Universiti Teknologi PETRONAS, a postgraduate student needs to submit at least two paper publications before the dateline of viva.

2.1 Where to Publish?

With the growth of online publication, other items to consider can include open access where the journal articles free of charge to all who may be interested. One consideration is whether to choose a journal that immediately provides open access to all its content (Day & Gastel, 2012). For example, IEEE, a non-profit organization. IEEE published 151 transactions, journals and magazines. The IEEE *Xplore* digital library contained more than 3 million documents and sponsored more than 1,000 conferences every year (Ieee.org, 2015).

In considering where to submit your paper, you might have looked at some journals' instructions to authors. Typically, these instructions both appear on the website of the journal and are published at least once per volume. Consider asking an experienced researcher or a librarian for help or contacting the office of the journal, if the instructions cannot be found after careful searching. Read the instructions for authors before starting to prepare the paper publication (Day & Gastel, 2012).

2.2 Challenges of Paper Publication

Choosing a journal carefully helps you to reach the most suitable audience, gain appropriate recognition, and avoid needless difficulties with publication. The decision where to submit the manuscript is important. Because of the poor choices, some papers are delayed in publication, fail to receive sound review and revision, or lie buried in inappropriate journals. If you submit your manuscript to a poor choice of journal, one of the three things can happen, all is bad (Day & Gastel, 2012).

First, the manuscript may simply be returned to the author, with the comment that your work is not suitable for this journal (Day & Gastel, 2012).

Second, you may be subjected to the trauma of rejection, even though the manuscript would be acceptable to the right journal. You could end up with a hassle over suggested revisions that you do not agree with and that do not improve your manuscript (Day & Gastel, 2012).

Third, even if the paper is accepted and published, your glee will be short-lived if you later find that your work is virtually unknown because it is buried in a publication that few in your intended audience read. Talking with colleagues can help prevent this situation (Day & Gastel, 2012).

2.3 The Benefits of Paper Publication

The paper publication from each department from each university are evaluated which provide each discipline with ranking. As the paper publications adding value in resume, the chances to be more outstanding in front of employer was high (Jaensch, 2010). Most prospective employers are avid to see demonstrable evidence that an individual can analyze and communicate clearly (Ware & Burns, 2008).

Next, the benefits publishing the paper publications are to ensure your name are well-known in the field of the study and to build a good academic reputation. The idea of publishing the paper publication was to disseminate the research content to the society and industry in the same field of study. Through the conference, the author was able to receive feedback on the research and writings (Jaensch, 2010). The author may improve the writing from the feedback and build network with the audience who may interested with the research.

At the same time, by publishing paper publication, the researcher will gain the advantage in the pleasure in "knowledge in the sake of knowledge" (Ware & Burns, 2008). The researcher gain intrinsic reward from the new or advance knowledge he may found out. The researcher may use the new advance knowledge he may found while completing his daily tasks and job as a worker of a company. His knowledge can allow him to defend his job position and job title from being cast off. The knowledge that he gained may also help him to climb a new job position which guarantee salary rose.

Paper publications also can benefit the industry through the enhancement of process methodology. The paper publication serves as a bridge between the academic

institutions and the industry application of a new technology. A mutual beneficial research and project development are often initiated by the publications in professional journals or proceedings' conference. The industry wide issue are discussed and solved through the information exchange across the industry and academic partition (Jameson, 1995).

CHAPTER 3

METHODOLOGY/PROJECT WORK

In this section, the author will be explaining the research methodology used, the planned Gantt chart, and tools required to develop the system.

3.1 Methodology

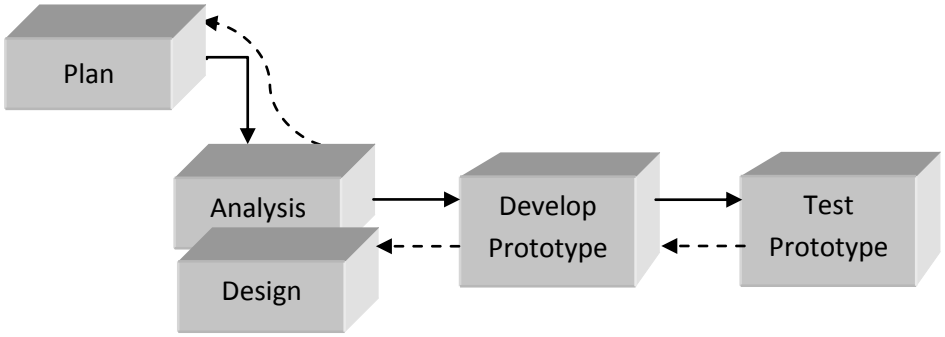


Figure 1: Methodology Diagram

Figure 1 had shown the project methodology diagram used by the author. The methodology used is based on the application of rapid application development methodology. The methodology is suitable for small scale project within a time constraint. Based on the figure, there are six phases. The six phases are plan phase, analysis phase, design phase, develop prototype phase, test prototype phase, and deployment phase.

The methodology is started with plan phase, followed by analysis phase and design phase. The methodology is further being expanded to the next phases which are develop the prototype phase, and test the prototype phase. The flow direction of the project methodology can be changed forward and backward continuously based on the changes requirement and add-on requirements. The phases are further elaborate in next sub sections.

3.1.1 Plan Phase

In this phase, the author had been planned to work on her supervisor's project entitled, "Paper Publication Information Systems". As discussed in Chapter One previously, there is a need to develop an information system for coordinator and postgraduate students whom came from Computer Information Sciences background.

Therefore, to completing the project, the author had to draft the methodology used to develop the information system. The methodology is viewing a whole big picture on how the author will develop the prototype for the information system within the time given to complete the prototype. The methodology is giving a big picture on how to develop the prototype from the beginning to the end of the prototype's development.

From the methodology drafted, the author create a Gantt Chart to draw the sequence of tasks involve in each phases and their duration taken to be completing. The Gantt Chart allows the author to view the timeline of the project and the expected completion date. The Gantt Chart allows the author to aware with the time and the tasks that needs to be completing before the expected completion date in order to deliver the Paper Publication Information System's prototype. A good plan can lead to a good direction but must be complement with action too.

3.1.2 Analysis Phase

Gathering information is very essential during the analysis phase. The gathering information is including understanding the needs and requirements of the information system, and stakeholders involved and affected with the development of the information system.

For the analysis phase, several meetings have been done to understand the needs and requirements to develop the information system. The problem arises from a situation that had created the needs and requirements to develop the information system. Therefore, to develop an information system, there is a need to understand

the business process to assigning the reviewers and submitting the paper before being evaluated by reviewers.

By understanding the problem and the business process before developing an information system, it is easier to understand the requirements to develop a web portal system. While delivering the requirements required by the stakeholders of the information system, the prototype can be implementing to keep track and update the paper's information and satisfied the stakeholders' requirements.

From the requirements required by the stakeholders, the author can analyze the actor involved and functionalities of the information system. Therefore, the author will come up with the use case diagram, data flow diagram and activity diagram. Thus, the author can design the database UML diagram, and system architecture of the information system. These diagrams will be discussed in detailed in Result and Discussion section.

3.1.3 Design Phase

From the data gathering during analysis phase, the database UML diagram and system architecture of the information system had been designed during the design phase. These diagrams are being used to critically understand the actors involved and what functions and features that the information system should do to replace the as-is system. From the actors, functions and features, a flow of data exchanges can be fully understandable and designed.

These diagrams are essential to design the graphical user interfaces. These graphical user interfaces are interfaces designed to allow the users to interact with the system through graphical icons and buttons. These interfaces allow the user to key-in the input necessary to be kept in the database stored in the server centre. The interfaces should be user friendly, ease to use, and acquired the standard of interfaces design. These graphical user interfaces design to be implementing as prototype before moving on to the development phase. The user interfaces will be further discussed in Result and Discussion section.

3.1.4 Develop Prototype Phase

In this phase, the author has to develop the prototype for the information system. This prototype is implementing the finalized diagrams that will be discussed further in the Result and Discussion section.

The implementation of the finalized diagrams is been done through the tools used and the suitable programming languages to ensure that the information system can be working and satisfied the requirements required by the stakeholder of the information system. The development of the prototype is developed using the local host server before being deployed in the domain server.

3.1.5 Test Prototype Phase

When the prototype has been developed, it is essential and critical for the author to make sure that the prototype is runs and functioning properly. This phase is important to ensure that the prototype of the information system meets and satisfies the requirement gathered during the analysis phase previously.

The test prototype phase is been done through the local host before being deployed in the domain server. After the deployment of the prototype, the test activities are carried out to ensure that the prototype is working as it is required to be functioning. At the same time, to ensure that the prototype meets the requirement required during the data gathering in the analysis phase previously.

3.2 Gantt Chart

Table 1: Gantt Chart

No.	Task	W1	W 2	W3	W 4	W 5	W6	W7	W 8	W 9	W1 0	W1 1	W1 2	W 13	W1 4
		(12/ 1- 16/1)	(19 /1- 23/ 1)	(26/ 1- 30/ 1)	(2/ 2- 6/2)	(9/ 2- 13/ 2)	(16/ 2- 20/ 2)	(23/ 2- 27/ 2)	(2/ 3- 6/3)	(9/ 3- 13/ 3)	(16/ 3- 20/ 3)	(23/ 3- 27/ 3)	(30/ 3- 3/4)	(6/ 4- 10/ 4)	(13/ 4- 17/ 4)
1.0	**Planning**	X													
1.1	Propose project	X													
2.0	**Analysis**		X	X	X	X	X	X	X	X	X	X			
2.1	Gather User Requirement		X	X	X	X	X	X	X	X	X	X			
2.2	Use Case Diagram				X	X	X	X	X	X					
2.3	Flow Chart Diagrams				X	X	X	X	X	X	X	X			
3.0	**Design**				X	X	X	X	X	X	X	X			
3.1	Design on architecture				X	X	X	X	X	X	X	X			
3.2	Design on database				X	X	X	X	X	X	X	X			
3.3	Design on user interface							X	X	X	X	X			
4.0	**FYP Requirements**											X	X	X	
4.1	Submission of Interim Report											X			
4.2	Proposal Defence													X	

3.3 Tools and Skills Required

Table 2: Tools and Sills Required

Tools	Minimum Requirement
Operating system	• Windows 7 Home Premium • 64-bit Operating System
Scripting languages	• HTML • CSS • jQuery • mySQL • PHP
Programming tools	• Adobe Edge Code CC Preview • XAMPP Control Panel
Database tools	• phpMyAdmin
Designing tools	• Microsoft Office Power Point 2007 • Microsoft Office Visio 2007
Server	• Local host • Domain host

Tools are essential and required during analysis, design, development phase, develop prototype phase, test prototype phase, and deployment phase. The tools are prescribed in the Table 2.

The operating system used is 64-bit of Windows 7 which is being used throughout the information system's prototype development. Microsoft Office Visio 2007 and Microsoft Office Power Point 2007 were used during analysis and design phase to design the use case diagram, activity diagram, data model diagram, and state diagram.

The scripting languages used are HTML, CSS, jQuery, mySQL, and PHP to develop the structured form with required layout which can be connected to the database while the Adobe Edge Code CC Preview and XAMPP Control Panel will

be used to develop the prototype and implement the design of the diagrams into coding of the information system.

The server at local host level will be used to develop and test the prototype of the information system before being deploy in the domain server. The prototype can be used by the coordinator and postgraduate students after being deployed in the domain server.

CHAPTER 4

RESULTS AND DISCUSSION

This chapter discusses on all of the results collected which the deliverables from analysis were and design phases before moving on to the next phase which was the development and system testing phases. The result helps to support the evidence towards achieving the objectives discussed earlier, together with the discussion. This chapter will describe on several main aspects mentioned below.

4.1 Business Process of Papers' Submission

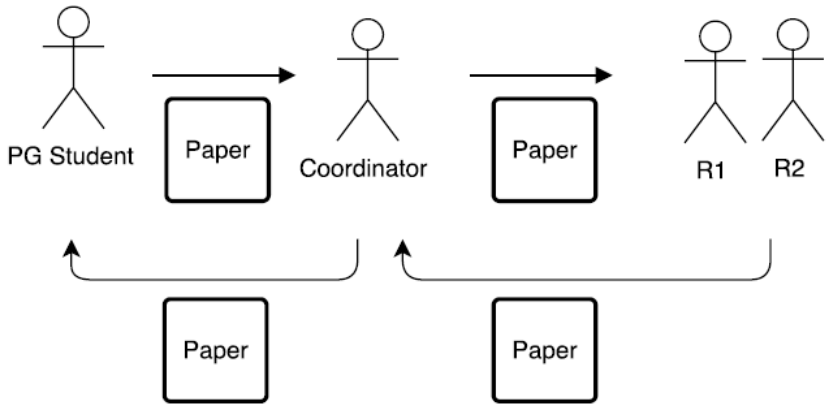


Figure 2: Paper Publication Submission Business Process

Figure 2 had shown the business process for postgraduate to submit the paper publications for evaluation purposes, the postgraduate students need to submit the paper publications to the coordinator. The coordinator will assign few reviewers to each paper for evaluation processes. The assignation of each paper is based on the research cluster categories. Usually, time allocation had been given for the evaluation period which was ten days.

After the evaluation period, the reviewers will return back the papers to the coordinator. The coordinator will key-in the information in the Excel file before return the papers back to the postgraduate students.

What can the system should do from the current business process? The system should allow the coordinator to view profile, assign reviewers, update paper status, and view statistical report generated automatically. Contrastingly, the postgraduate students may edit and update the personal details and paper's information, view profile, and view paper's status.

4.2 Use Case Diagram

Figure 3 shows the use case diagram of the PPIS. The Figure 3 illustrates the functionalities of the system.

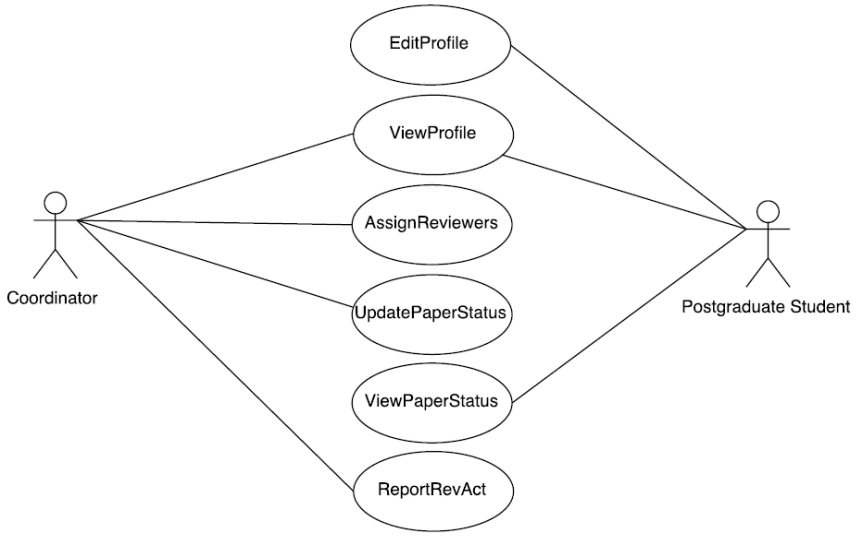


Figure 3: Use Case Diagram

Based on Figure 3, the use case diagram has shown the actors of the system. The actors are coordinator and postgraduate students. The coordinator should be able to view profile of the postgraduate students, assign reviewers, update the paper's status, and request report review activity. On the other hand, the postgraduate student able to the system to edit profile of the papers and self-details. At the same time, the postgraduate students are also able to view the profile, and view the paper's status.

4.3 System Architecture Design

Figure * shows the design of the system architecture for prototype of PPIS. The system is a development comprised of hardware and software. The hardware would be the computer used to access towards the system. On the other hand, the software will be developed using HTML, CSS, PHP, and MySQL programming languages.

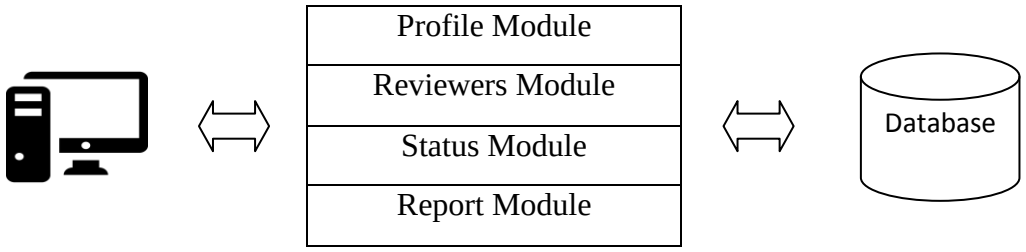


Figure 4: System Architecture

Based on the system architecture diagram of PPIS whereby there are five modules to be developed:

Module 1: Profile Module – The postgraduate students should be able to register their profile and key-in their paper publications. The system will save the information in the database for later retrieval.

Module 2: Reviewers Module – This module should allow the coordinator update the paper's status. The system will save the information in the database and disseminate the papers' status automatically.

Module 3: Status Module – The module should allow the coordinator to assign reviewers to each paper for evaluation processes. Only coordinator can have the manipulation access towards the information.

Module 4: Report Module – Report will be generated automatically according to its classification information when requested by the coordinator. Only coordinator is accessible to the information.

4.4 Activity Diagram

Figure 5 till Figure ** had shown the activity diagram of the system. The Figure had been explained below.

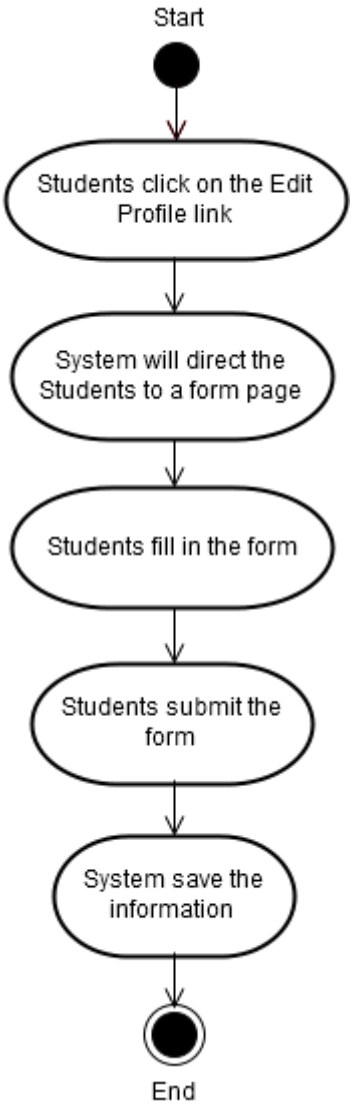


Figure 5: Edit/Update Profile

The postgraduate students are allowed to update the profile activity from to time. The system allows the student to edit the information regarding the personal details and the paper's information.

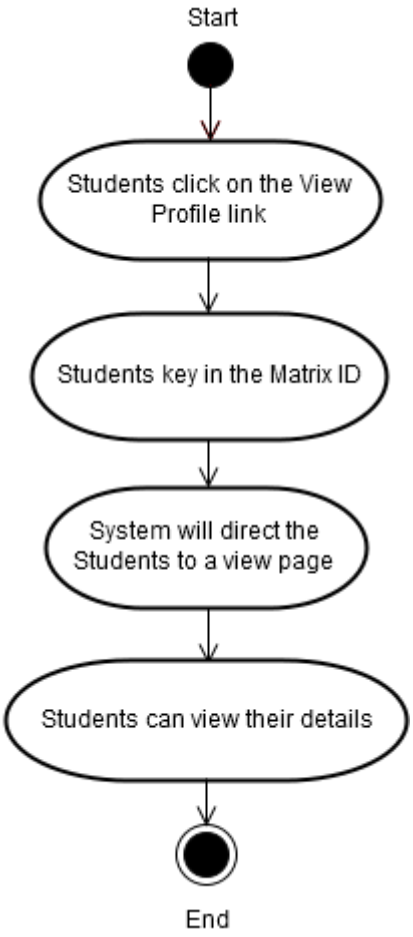


Figure 6: View Profile

The Figure 6 had described the viewing activity being done by the postgraduate students. The postgraduate students must key-in the student ID or matrix ID into the system before the system retrieves the details from the database.

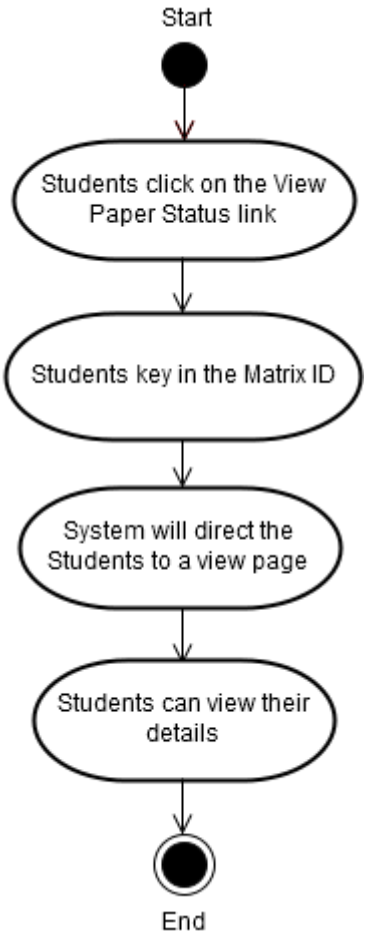


Figure 7: View Paper's Status

The postgraduate students can view the paper's status by key-in their Matrix ID.

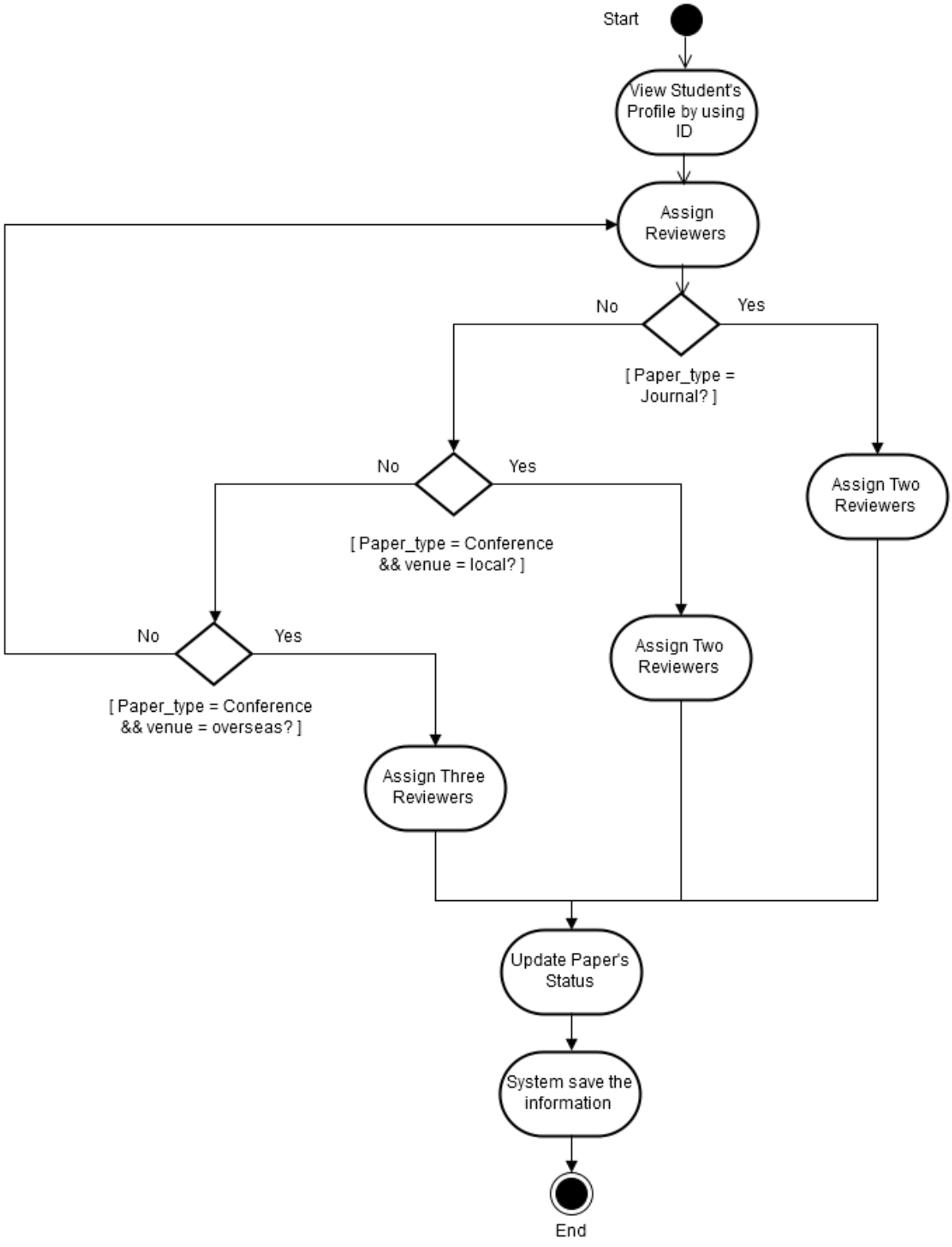


Figure 8: Assign Reviewers

Figure 8 had shown the activity diagram of assigning reviewers. If the paper_type is equal to journal, two reviewers will be assigned to the paper. If the

paper_type is equal to conference and the venue of the conference is in Malaysia, only two reviewers will be assigned. On the other hand, if the paper_type is conference and the venue of the conference is outside of Malaysia, three reviewers will assign to the conference. Each reviewers assigned to the paper is based on the research cluster. The research cluster is categories of the field of study.

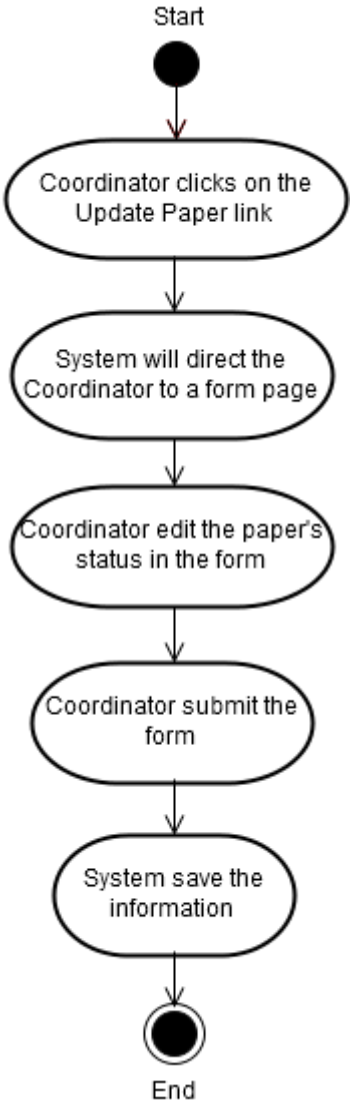


Figure 9: Update Paper's Status

The coordinator could update the paper's status when clicking on the link based on the Figure 9. The link will direct the coordinator to the respective form page to update the paper's status.

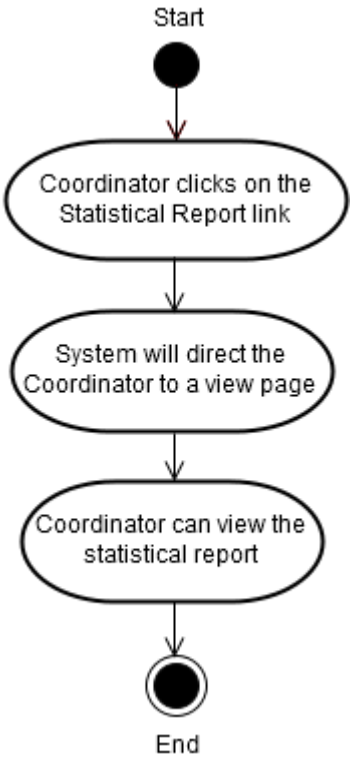


Figure 10: View Statistical Report

The coordinator can view the statistical report that can be generated automatically.

4.5 Data Model Diagram

In PPIS, there are seven main tables with four associative tables in the database structure as shown in Figure 11.

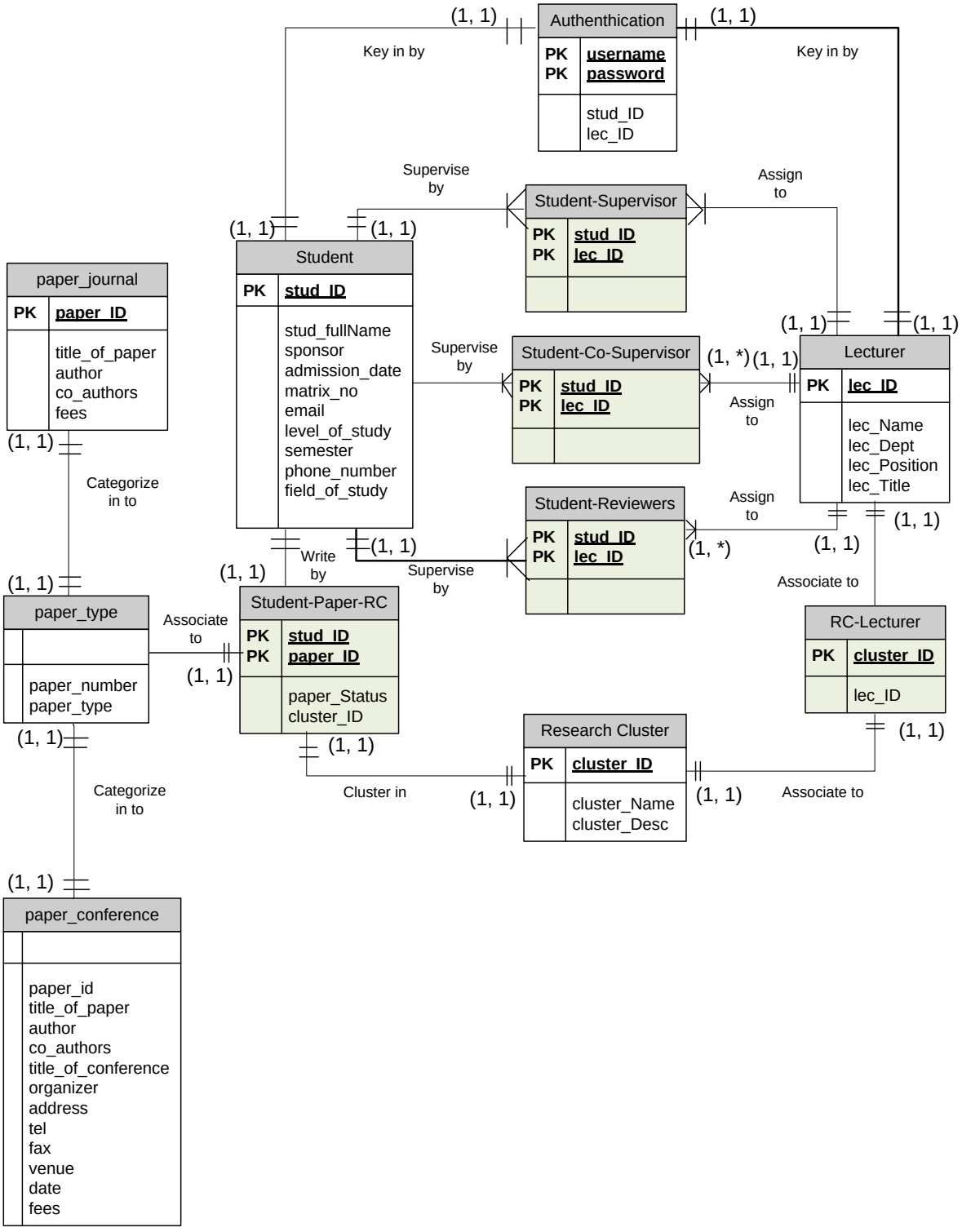


Figure 11: Database Diagram

4.6 Navigation Diagram

The navigation diagram had shown how the system will be navigated by the end-users of the system.

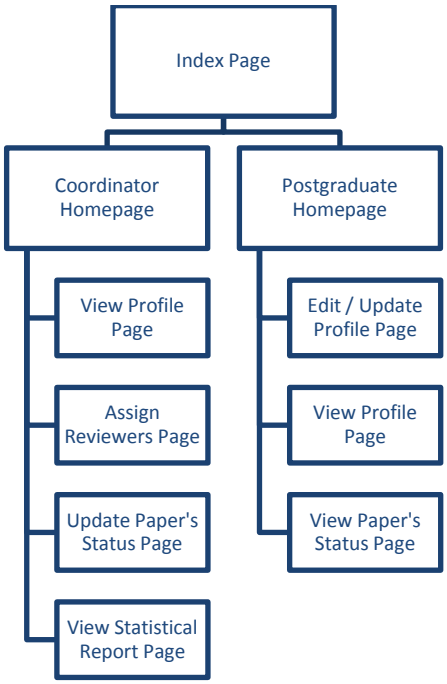


Figure 12: Navigation Diagram

From Figure 12, the end-users can view the index page of the system. If the end-user is coordinator, the coordinator may click on the coordinator homepage. From the coordinator homepage, the end-user can view profile page, assign reviewers page, update paper's status page, view statistical page.

On the other hand, if the end-user is postgraduate students, the end-user can navigate the edit/update profile page, view profile page, and view paper's status page from the postgraduate homepage. The interface of the pages will be explained in the next sub section of this chapter.

4.7 Graphical User Interfaces Deliverables

Some of the functions of the system were unable to be developed due to time constraint. However, the development is still on-going to fulfil the development satisfaction of the system.

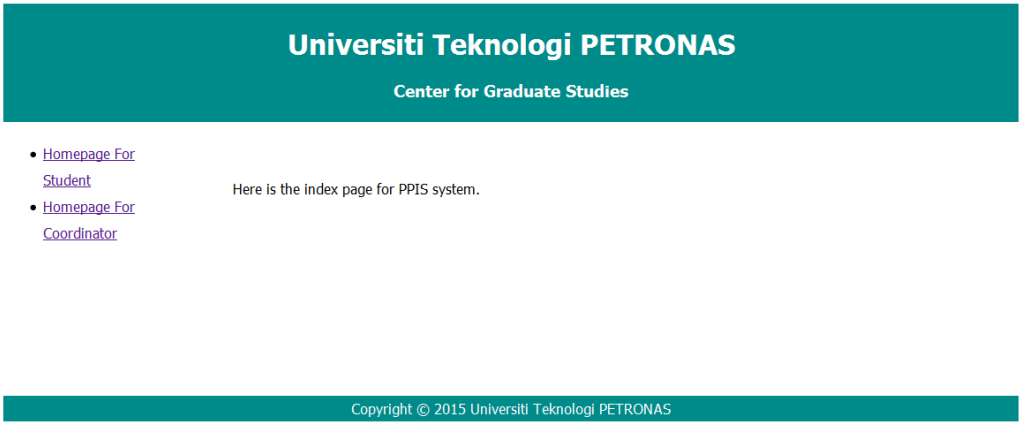


Figure 13: Index Page

Figure 13 had shown the index page for the system. If the end-user is postgraduate student, he may click on the *Homepage for Student* link. However, if the end-user is coordinator, he may click on the *Hompage for Coordinator* link.

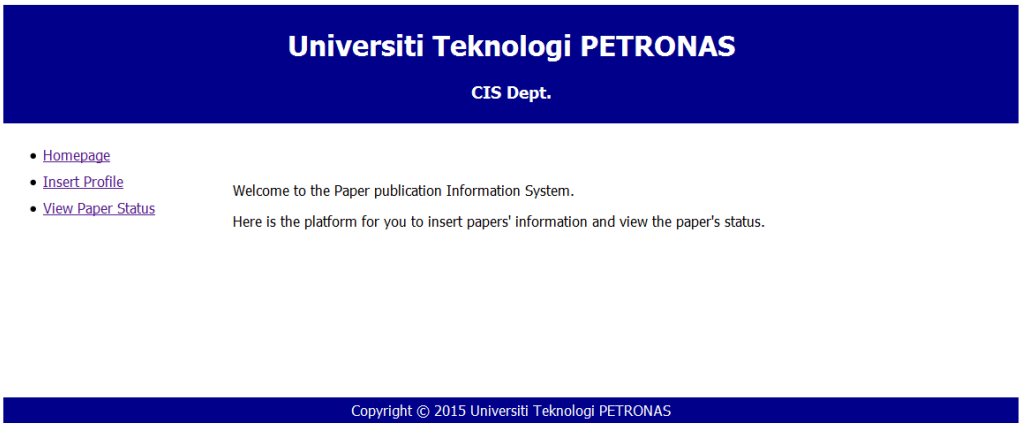


Figure 14: Postgraduate Student Homepage

The Homepage for postgraduate student had been showed in the Figure 14. The system allows the postgraduate student to navigate the insert profile and view paper status function.

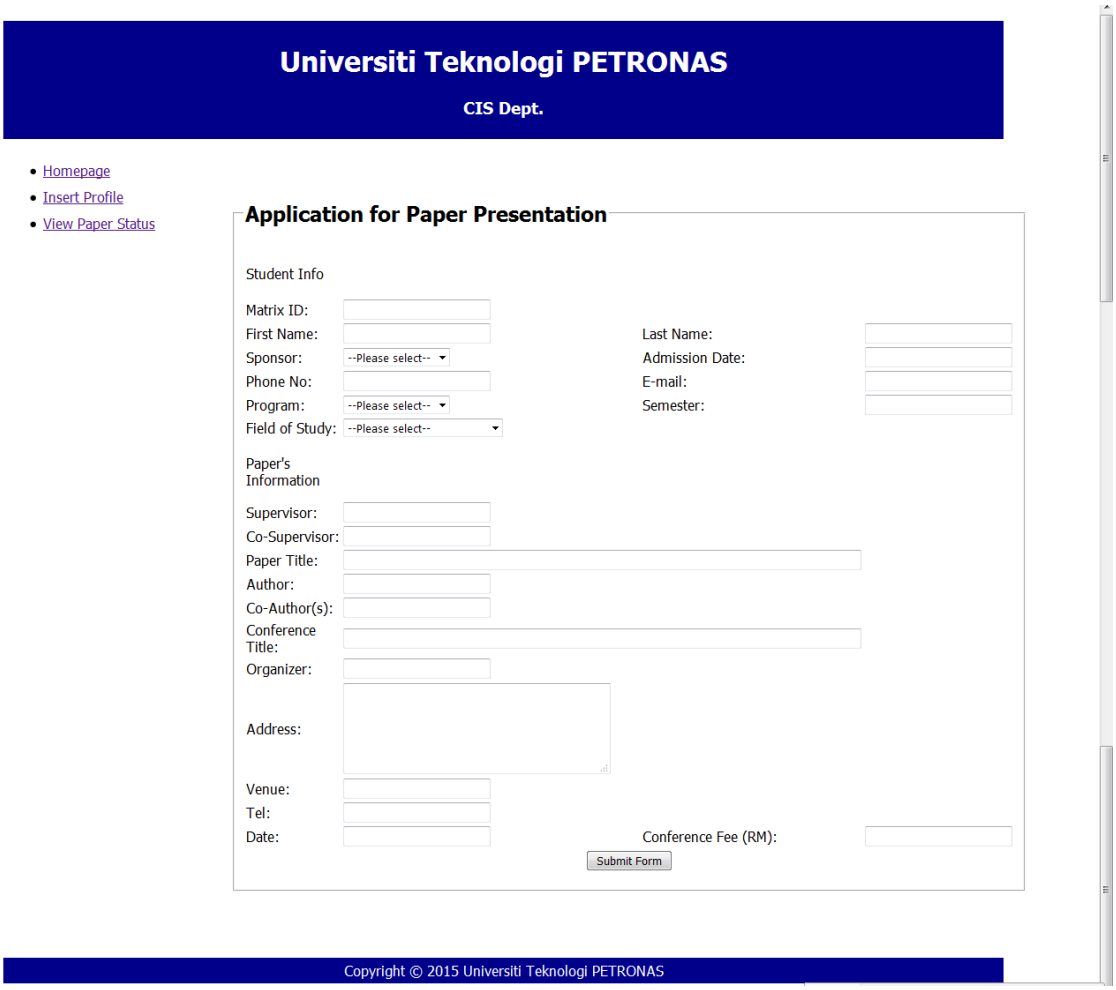


Figure 15: Edit/Update Profile

Figure 15 showed that the system allows the postgraduate student to fill in the personal details and the paper's information. The information will be saved in the cloud database.

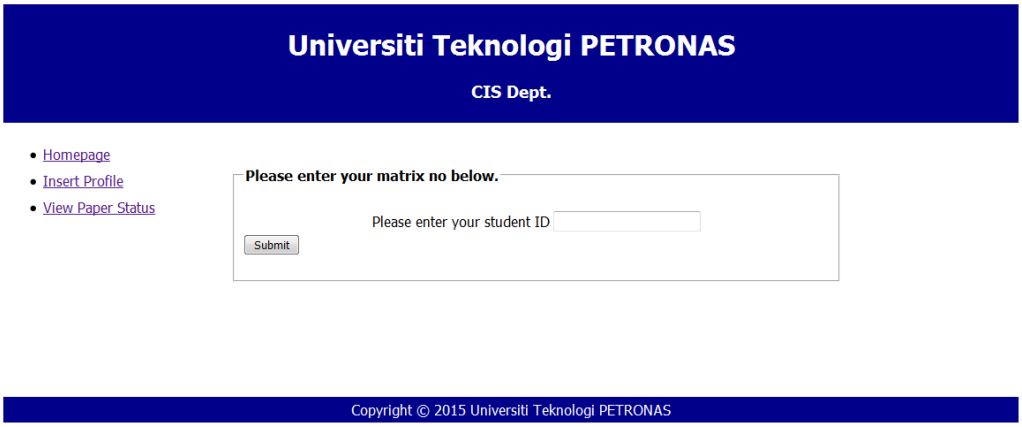
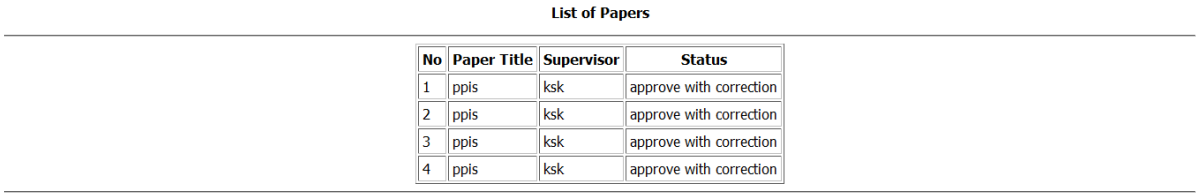


Figure 16: View Paper's Status

If the postgraduate students wanted to check their paper's status, they must keyed-in the student ID before viewing the result. Figure 16 referred.



List of Papers

No	Paper Title	Supervisor	Status
1	ppis	ksk	approve with correction
2	ppis	ksk	approve with correction
3	ppis	ksk	approve with correction
4	ppis	ksk	approve with correction

Figure 17: View Paper's Status

Figure 17 showed the results requested by the postgraduate students. The status of the paper may vary according to whom hold the paper and the updated paper's approval.

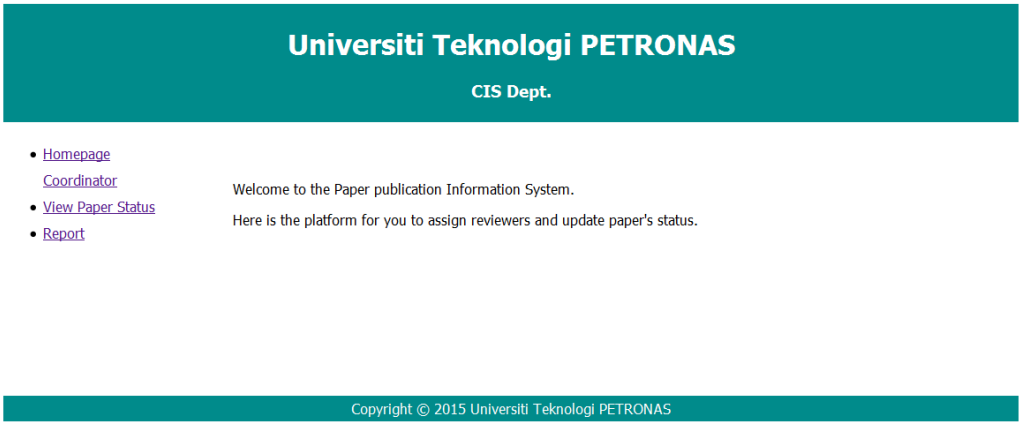


Figure 18: Coordinator Homepage

Homepage for coordinator was shown in Figure 18. The homepage allowed coordinator to navigate to the view paper status and view report.

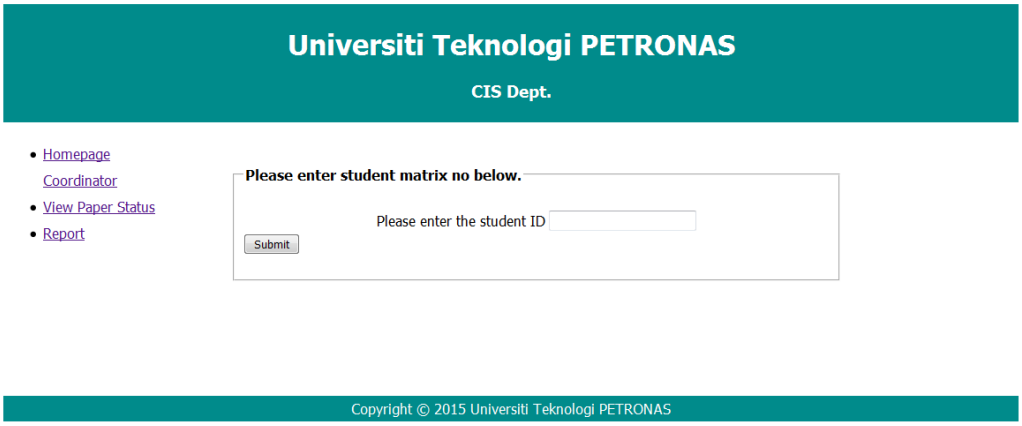


Figure 19: View Paper's Status

Coordinator needs to key-in the postgraduate student ID before viewing the postgraduate student papers' information. Figure 19 referred.

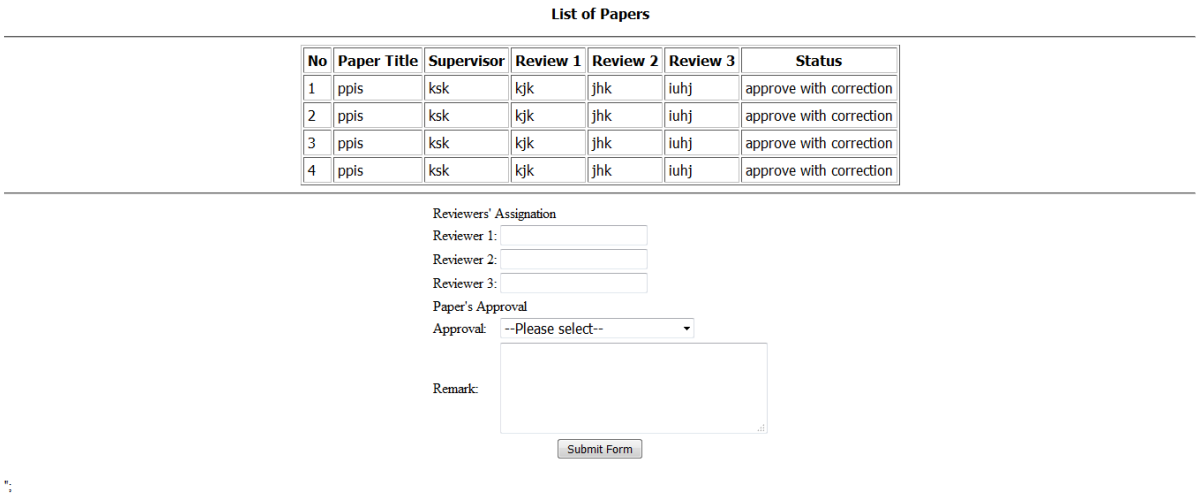


Figure 20: Update Paper's Status

Based on the Figure 20, the coordinator can view the papers' information of the postgraduate student. And at the same time, coordinator was able to update the papers' information such as reviewers, and paper's status.

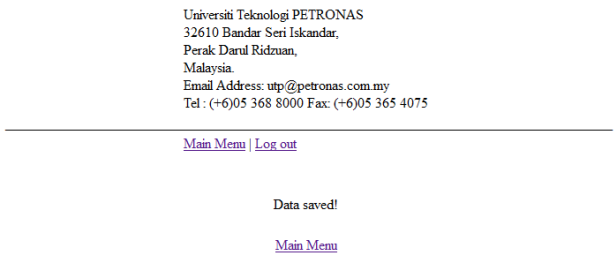


Figure 21: Congratulate Page

The coordinator will navigate to congratulate page as shown in Figure 21, once the database able to capture and saved the information.

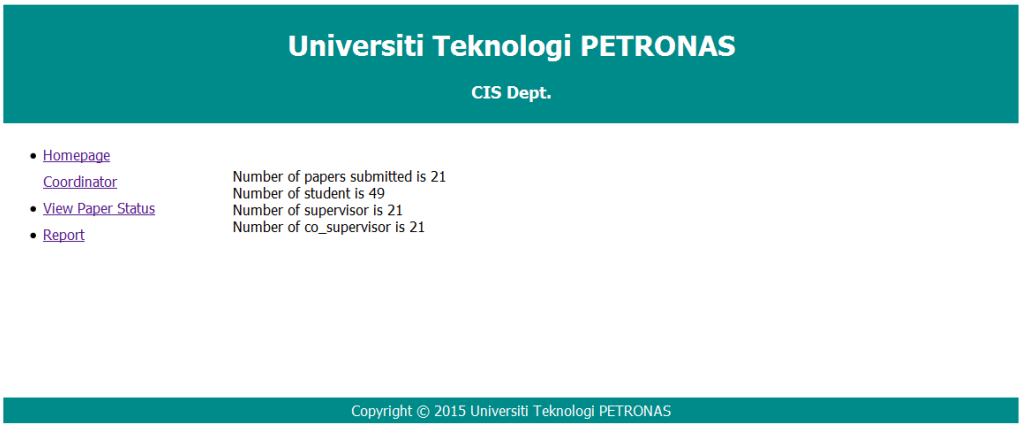


Figure 22: View Statistical Report

Coordinator may generate a statistical report automatically by clicking on the *Report* link such as in Figure 22.

CHAPTER 5

CONCLUSION AND RECOMMENDATION

As the conclusion, the information system serves as a platform for both coordinator and post graduate students. By having PPIS as the platform, the information of the paper publication can be exchanged between the coordinator and the post graduate students easily. The paper explained how the information system being used. The information system will ease the Student to check their paper status. Therefore, Student may not make any appointment or waiting the availability of the Coordinator in the office. The Student can easily access to the system to check the paper status.

In future, the information system will broaden the scope whereby the system allows the reviewers and the HOD of CIS department to login into system. The system will allow the reviewers to receive notification that notify them to evaluate a particular paper submitted by the post graduate students. The reviewers will update the progress of the evaluation process to the coordinator and update the paper's status. After ten days, the coordinator will update the paper's approval either being rejected or accepted. Contrastingly, the HOD of CIS department can view the review activity's report at anytime and anywhere whenever applicable. And at the same time, can approve the paper's approval before the evaluation results being published and disseminate to the post graduate students.

The database of the information systems can be evolved into several data marts where the number of the information increases over the time to enhance the scalability of the system. At the same time, the system can be improved from the aspects of security and performance of the system.

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APPENDIX

Appendix 1: Edit Profile Use Case Diagram

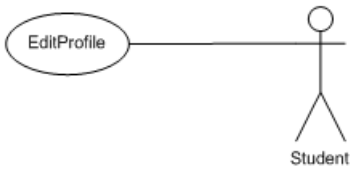

FIGURE 23: EditProfile Use Case Diagram

Use Case: EditProfile

Use Case ID: UC02

Actors: Student

Pre-Conditions:

1. Student must possess username and password from Co-ordinator
2. The Student is logged in the system.

Flow of the Events:

1. The use case begins with when the Student clicked on the Edit Profile button.
2. The system asks the Student for the following personal information: Full Name, Sponsor, Admission Date, Matrix No, E-mail, Level of Study, Semester, Phone Number, Field of Study, Supervisor, and Co-Supervisor, Title of the Paper, Author/Co-Author, Title of Conference, Organizer, Address, Tel/Fax, Venue, Date, and Fees.
3. The Student enters the requested information.
4. The Student clicks on the Submit button.
5. The system confirms that the Student information has been accepted.
6. The system assigns a unique Student identifier to the Student.

Post-Conditions:

1. The system has saved the Student details.
2. The Student is assigned a unique customer identifier.

Appendix 2: View Profile Use Case Diagram

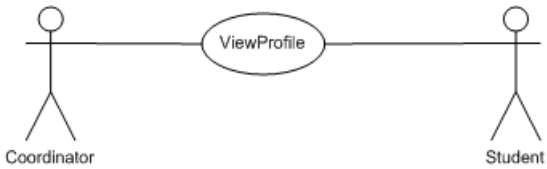

FIGURE 24: ViewProfile Use Case Diagram

Use Case: ViewProfile

Use Case ID: UC03

Actors: Student, Co-ordinator

Pre-Conditions:

1. The Student or Co-ordinator must be logged on to the system.
2. The View Profile button must be clicked on.

Flow of the Events:

1. The use case begins when the Student or Co-ordinator selects View Profile hyperlink.
2. If the actor is Student

   Then the system displays a page of the current Student's profile.
3. Else If the actor is Co-ordinator

   Then the system displays a cumulative of Student summary Profiles.

   Then the Co-ordinator may select a profile.
4. The system displays full details of the profile.

Post-Conditions:

1. The system displays full details of an order.

Appendix 3: Assign Reviewers Use Case Diagram

FIGURE 25: AssignReviewers Use Case Diagram

Use Case: AssignReviewers

Use Case ID: UC04

Actors: Coordinator

Pre-Conditions:

1. The Co-ordinator must be logged on to the system.
2. The Student updated their profile.
3. The Assign Reviewers drop down box must be clicked on.

Flow of the Events:

1. The use case begins when the Coordinator clicks on the drop down box which contains the name list of the Reviewers to be assigning to the Student.
2. If paper_type = paper_journal
   Then Coordinator will assign two Reviewers.
3. Else If paper_type = paper_conference
   If venue = Oversea
   Then Coordinator will assign three Reviewers.
   Else If venue = Local
   Then Coordinator will assign two Reviewers.
4. The Coordinator clicks on the Submit button.
5. The system confirms that the assignation information has been accepted.

Post-Conditions:

1. The system has saved the assignation information.
2. The Reviewers has been assigned to Student.
3. The Coordinator informs the assignation to both Student and Reviewers.
4. The Coordinator hands in the Student's paper to the Reviewers to be evaluating manually.

Appendix 4: View Reviewers Use Case Diagram

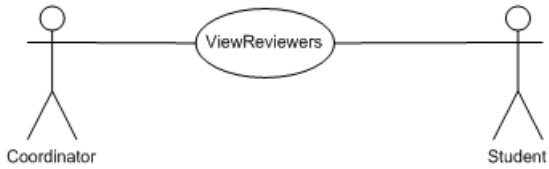

FIGURE 26: ViewReviewers Use Case Diagram

Use Case: ViewReviewers

Use Case ID: UC05

Actors: Student

Pre-Conditions:

1. The Student must be logged on to the system.
2. The Reviewers must be assigned to the Student by Coordinator.
3. The Student must click on the View Reviewers hyperlink.

Flow of the Events:

1. The use case begins when the Student selects View Reviewers hyperlink.
2. The system displays a page of the current Student's profile and Reviewers assigned.
3. The page displays full details of the profile.

Post-Conditions:

1. The page displays full details of the profile.

Appendix 5: Update Paper Status Use Case Diagram

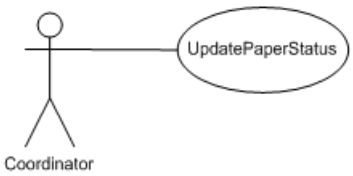

FIGURE 27: UpdatePaperStatus Use Case Diagram

Use Case: UpdatePaperStatus

Use Case ID: UC06

Actors: Coordinator

Pre-Conditions:

1. The Coordinator must be logged on to the system.
2. The Coordinator must clicks on the Update Paper Status hyperlink.

Flow of the Events:

1. The use case begins when the Coordinator selects Update Paper Status hyperlink.
2. The system asks the Coordinator to enter the details of the paper status in a text box.
3. The Coordinator enters the details of the paper status and clicks the Update button.
4. The system saved the details of the paper status.

Post-Conditions:

1. The system saved the details of the paper status.

Appendix 6: View Paper Status Use Case Diagram

FIGURE 28: ViewPaperStatus Use Case Diagram

Use Case: ViewPaperStatus

Use Case ID: UC07

Actors: Student

Pre-Conditions:

1. The Student must be logged on to the system.
2. The Coordinator has updated the paper status.
3. The Student must click on the View Paper Status hyperlink.

Flow of the Events:

1. The use case begins when the Student selects View Paper Status hyperlink.
2. The system displays the status of the paper.

Post-Conditions:

1. The system displays the status of the paper.

Appendix 7: Report Review Activity Use Case Diagram

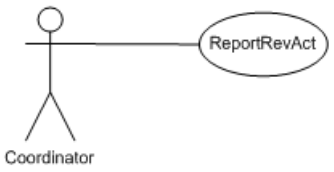

FIGURE 29: ReportRevActUse Case Diagram

Use Case: ReportRevAct

Use Case ID: UC08

Actors: Coordinator

Pre-Conditions:

1. The Coordinator must be logged in to the system.
2. The Coordinator must clicks on the Report Review Activity hyperlink.

Flow of the Events:

1. The use case begins when the Student selects Report Review Activity hyperlink.
2. The system displays few tables of statistics; number of students assigned to the reviewers, and the number of the paper status rejected or accepted.

Post-Conditions:

1. The system displays few tables of statistics; number of students assigned to the reviewers, and the number of the paper status rejected or accepted.